Case Study: fishing communities along Steung Sen have been hit the hardest by the construction of dams



Our community in Phatsandai village have a high reliance on fishing which is the main source of livelihood. The area is located at the conjunction of Steung Sen and the Tonle Sap Lake. Mr. Sok Seung, 71 who has 3 family members shared that until about 5 years ago, his family and other people in the community could catch 600kg of fish per day using traditional fishing tools. People enjoyed processing their catch both for household consumption and the market. The amount of fish we catch has currently deteriorated to about 20kg or less per day.



Since the withdrawal of privatization on fishing lots on Tonle Sap Lake and its tributaries in 2010, we have been free to work in the expanded public fishing areas. This poses many threats to the lake's ecosystem, including overexploitation of fisheries and wildlife resources, dry-season encroachment, and land clearance of the flooded forest. Illegal fishing and poaching have been rising and the amount of fish caught is declining every year. Presently, about 70% of the flooded forest cover in Phatsandai commune has been lost.

The quality of our water source is being polluted by sediments, siltation, poisons used to catch massive amounts of fish, and chemical fertilizers and pesticides used on farms near the rivers during the dry season increases contamination. The cost of clean water is very high for the village people (USD0.75/20 litters) causing regression of income by 35% on average.

Most people have limited sources of livelihood. Young people are forced to migrate in search of temporary jobs at garment factories or construction sites in other provinces in Cambodia, or Thailand. 10% of our local residents have already moved to other places.



Steung Sen originates from the Dangraek mountain and flows through several streams before filling the river. The river is the longest amongst other tributaries and flows to the Tonle Sap Lake through Preah Vihear and Kampong Thom provinces. The river has a unique biodiversity of wildlife and tree species that support livelihood activities such as fishing, subsistence farming and cash crop production to many local residents.

The river also receives the reverse flow from Tonle Sap Lake during the dry season bringing plenty of fish species to spawn such as Trei Pruol, Trei Bra, and Trei Khlong Hay. These fish species travel a long way from Steung Treng and Kratie through the Tonle Sap Lake.

In the last 12 years, the rainy season brings floods around three times a year during May-June, covering wetlands, grasslands, and rice fields. It provides sanctuary and breeding grounds for the migratory fish, other aquatic organisms and terrestrial wildlife such as birds, reptiles, and mammals.

However, the flooding period was much longer and used to last up to 5-6 months every year. During the dry season, the fertile floodplains offered farming opportunities to communities for growing rice, vegetable, fruit and crops as a secondary source of income to support their livelihood.



Recently, flash floods have been more frequent and happen in a shorter period of time within 2-3 months, with up to five flash floods in August only. The water surface inundates those areas and poses a critical threat to balancing the wetlands ecosystem of the river.

The hydroelectric dams constructed in the upper stream countries such as Lao PDR and China have a direct influence on water inflows and outflows in the Mekong River and subsequently the Tonle Sap Lake. The abovementioned fish species can no longer travel from Steung Treng and Kratie to the basin, and the few that survive are found either the basin or Steung Sen. Other dams are under construction in Putrea village in Putrea commune, Roveang district in Preah Vihear province, Dang Kambet village in Ngon commune, Sandan district in Kampong Kor commune, and in Kampong Svay district in Kampong Thom province¹ will inevitably face the same problems of upsetting the local biodiversity and way of life.

Our community in Phatsandai commune has submitted a request to the provincial authority to secure legal rights for possessing land title for housing, and rice production, and to also build a community road that connects Phatsandai commune with Kampong Thom town. But the response remains uncertain.

Narrated by: Mr. Sok Seung on 17 July 2022 Photographed: Mr. Ros Bapong Interviewed by Mr. Ros Bapong Rewritten by Mr. Sok Somith

¹ Source: Mr. Vanny, the provincial department of water resources and meteorology, Kampong Thom province.